

# The Groundplane



DINNER LOCATION — SFO PIZZERIA CORNER OF WALNUT AND PASEO PADRE—WE'LL SEE YOU AT 6PM

Newsletter Story Complied — By Bill Artelt, WB9YVM

April, 2006  
Volume 7 Issue 4

## The Founding of Fremont

The area now known as Fremont had been occupied for thousands of years by the Ohlone people and their ancestors when Spanish priests arrived from Mexico and founded Mission San Jose in 1797. After Mexico won independence from Spain in the early 1800's, an appointed administrator divided the mission lands into four large tracts known as Rancho del Agua Caliente, Rancho Arroyo de la Alameda, Rancho Potrero de los Cerritos, and Ex-Mission San Jose.

John C. Fremont arrived in the 1840's to map a trail through Mission Pass. California's admission to the United States and the Gold Rush stimulated their migration to the area, attracting people from all parts of the world. By 1853, the communities of Mission San Jose,



Centerville, Niles, Irvington, and Warm Springs had formed themselves into Washington Township. The City of Fremont officially came into existence on January 23, 1956, when citizens of their towns to form a single city.

### Program Announcement

Have you ever wondered how a small diameter loop can work as an HF antenna? Well, you can find out at this month's SBARA meeting. Adam Feriante, KG6HDR, has been experimenting with Loop Antennas for 20, 40 and even 80 Meters. Adam will explain how the loops are constructed and their basic theory of operation. He will have an example of one of his Loops for you to see. Be sure and attend this interesting presentation. Invite a fellow ham friend to attend with you. See you on the 14<sup>th</sup> at 7:30PM.

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Happy Easter !!!

### Articles of Interest

- Founding of Fremont
- Loop Antennas with Adam

# The Great 1906 Earthquake, 100 Years Ago.

The California earthquake of April 18, 1906 ranks as one of the most significant earthquakes of all time. Today, its importance comes more from the wealth of scientific knowledge derived from it than from its sheer size. Rupturing the northernmost 296 miles (477 kilometers) of the San Andreas fault from northwest of San Juan Bautista to the triple junction at Cape Mendocino, the earthquake confounded contemporary geologists with its large, horizontal displacements and great rupture length. Indeed, the significance of the fault and recognition of its large cumulative offset would not be fully appreciated until the advent of plate tectonics more than half a century later. Analysis of the 1906 displacements and strain in the surrounding crust led Reid (1910) to formulate his elastic-rebound theory of the earthquake source, which remains today the principal model of the earthquake cycle.



Explanation of wireless communication.....

"YOU SEE, WIRE TELEGRAPH IS A KIND OF A VERY, VERY LONG CAT. YOU PULL HIS TAIL IN NEW YORK AND HIS HEAD IS MEOWING IN LOS ANGELES. DO YOU UNDERSTAND THIS? AND RADIO OPERATES EXACTLY THE SAME WAY: YOU SEND SIGNALS HERE, THEY RECEIVE THEM THERE. THE ONLY DIFFERENCE IS THAT THERE IS NO CAT." --

ALBERT EINSTEIN

**Telegraph key** (also known as the **Morse key**) is a generic term for any switching device used primarily to send Morse code. Similar keys are used for all forms of manual



telegraphy. Two common uses include the electrical telegraph over wires which activates a Telegraph sounder and radio telegraphy.

## Field Day 2006 — By the SBARA Board Members, et al

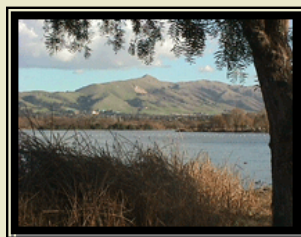
Mark your calendar for June 23<sup>rd</sup>, 24<sup>th</sup> & 25<sup>th</sup>. SBARA Field Day 2006 will be at Lake Elizabeth in Fremont's Central Park. As usual, the KU6S gang will be located adjacent to the parking lot off Paseo Padre Blvd at Sailway Drive.

Thanks to Mike Studer's donation of his time, SBARA's 2006 Field Day will have the added feature of someone winning a new assemble and tested

[Elecraft K2](#) HF Transceiver, SSB module included. The raffle will be held at the Saturday Barbeque dinner. Tickets will be pre-sold again this year and the number sold will be limited to 100. Everyone is invited to participate in the raffle and anyone who comes to Field Day can purchase tickets for the Elecraft K1 HF Transceiver Raffle prior to the drawing.

The barbeque will be at 5:00PM on Saturday June 24<sup>th</sup>. SBARA provides the Hot Dogs, Hamburgers and all the drinks. To offset this expense we are asking everyone to donate \$3 per family member over 12 years of age with children under 12 being free. Remember for the potluck part or the meal, if your last name begins with the letter A to M you are to bring a salad. If your last name begins with N to Z you are to bring a desert.

We will be operating multiple stations as we always have so if you are interested in setting up a station contact Andy Romeril KG6MSD [aromeril@comcast.net](mailto:aromeril@comcast.net) and he will give you the details.



The plan is to run stations on the combination of battery power and generators. As in the past all stations will have N1MM computer logging and the CW operation will be using the logging software to send the CW replies from memory.

Operators are always needed to keep the stations 'on the air' for 24 hours. If you haven't operated in the past, please give it a try.

Someone will be more than happy to assist you if you just let us know you are interested in operating. Signup sheets will be available at each station for you to reserve a specific time to operate and/or help out logging.

It goes without saying that we can use all the help we can get on Friday starting at 11AM to setup the equipment and likewise on Sunday at 10AM to teardown the same. This year the goal is to erect simpler antennas so the effort

required is lower than in the past. For those who come and help setup on Friday the 23<sup>rd</sup>, a lunch will be a provided.

Mark your calendar for June 23<sup>rd</sup>, 24<sup>th</sup> & 25<sup>th</sup>. SBARA Field Day 2006 will be at Lake Elizabeth in Fremont's Central Park. We will be located adjacent to the parking lot off Paseo Padre Blvd at Sailway Drive. And... if you didn't in advance, be sure and come by and buy a ticket for the Elecraft K2 SSB HF rig raffle and enjoy the barbeque with your family and friends.

73, SBARA Leadership Team

## Happenings Around — By Steve Wilson, KA6S

| <i>Date</i> | <i>Time</i>     | <i>Description</i>                   |
|-------------|-----------------|--------------------------------------|
| April 1-2   | Multi-Day Event | Backer to Vegas                      |
| April 1     | 5:00 PM         | Transmitter Hunt                     |
| April 2     | 7:00 AM         | Livermore Swap meet                  |
| April 7     | 7:30 PM         | SBARA Board Meeting                  |
| April 8     | 5:00 AM         | Foothill Flea Market                 |
| April 10    | 7:00 PM         | Sunnyvale VEC Exam - Fremont         |
| April 14    | 7:30 PM         | SBARA General Meeting                |
| April 21-23 | Multi-Day Event | Visalia International DX Convention  |
| April 22    | 6:00 PM         | Transmitter Hunt - Fox's Choice      |
| April 23    | 8:00 AM         | Valley of the Moon (Sonoma) Ham Fest |
| May 5       | 7:30 PM         | SBARA Board Meeting                  |
| May 6       | 5:00 PM         | Transmitter Hunt                     |
| May 7       | 7:00 AM         | Livermore Swap meet                  |
| May 8       | 7:00 PM         | Sunnyvale VEC Exam - Fremont         |
| May 12      | 7:30 PM         | SBARA General Meeting                |
| May 13      | 5:00 AM         | Foothill Flea Market                 |
| May 19-21   | Multi-Day Event | Dayton Hamvention                    |
| May 21      | 7:30 PM         | SBARA General Meeting                |

Folks - I'm STILL looking for input. Any items you want to see here - drop me a line at [stevew@ka6s.com](mailto:stevew@ka6s.com).



## It's A Photo Contest — By QST

Have you ever wanted to see a photo of yours in *QST*, the annual ARRL Amateur Radio calendar or another ARRL publication?

Well, here's your chance! Not only will your photographic skill be propagated far and wide, but we're offering a



\$100 prize to the winning entry. The winning photo and three runners-up will be published in *QST*. All submitted photos will also be considered for the 2007 ARRL calendar. Photos must be received at ARRL Headquarters by May 31, 2006. Subject matter must relate to Amateur Radio and be in good taste. Photos will be judged on overall quality and composition. Digi-

tal images or color prints are acceptable, but digital, images must have at least 300 dpi resolution.

E-mail digital images of up to 2 MB or copy to a CD and mail to ARRL Photo Contest, 225 Main St, Newington, CT 06111. All entries must include caption information describing where the photo was taken, along with the names and call signs of anyone appearing in the photograph. Photos submitted become the exclusive property of the ARRL, and decisions of the judges (*QST* editorial and production staff) are final. Only one entry per person is allowed.

Filters are a hot topic with SBARA members when discussing Field Day interference. They can help eliminate cross band interference. Or to put it simply, it keeps the 40 meter stations off 20 meters. Huh? How does it do that? Well 40 meters is 7000-7300 KHz. And 20 meters is 14000-14300 KHz.

The second harmonic of 7000 is 14000. And at close range the second harmonic is going to be loud! We bought some bandpass filters for our 40 meter stations. This allows sig-

nals in the 40 meter band to "pass" through. But greatly attenuates all others. So a 20 meter harmonic is going to be squashed down pretty hard by the 40 meter filter. We put the filters on a fancy network analyzer and did some experimenting. It looks like it's going to work very well. And two of these in series even more aggressively attenuate out of band signals. But it's overkill.

Another type of filter you should consider putting on your HF stations is a low pass filter. It only passes frequencies below a set point. Typically this

point is 30 MHz. This type of filter will keep your HF rigs harmonics from bothering your neighbor's TV sets. I run one. The types of filters are pretty easy to keep sorted out. Low pass allows frequencies lower than a set point to pass. High pass filters only pass frequencies higher than their set point. And bandpass filters pass a narrow band of frequencies.

Well I hope that helps explain filters somewhat for you. If you have any questions ask me.

Mike K6EEP

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14803 Build America Dr. 22191  
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**Low Pricing!****DR-135TP** 2M mobile

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- Front Panel GPS in • Rear DB-9 port
- CTCSS/DCS Encode/Decode built in

**Low Pricing!**

## Handy Web Links

|                       |                                                                                                 |
|-----------------------|-------------------------------------------------------------------------------------------------|
| SBARA Web Site        | <a href="http://www.sbara.org">http://www.sbara.org</a>                                         |
| ARRL Main Site        | <a href="http://www.arrl.org/">http://www.arrl.org/</a>                                         |
| ARRL SCV Division     | <a href="http://www.arrl.org/sections/SCV.html">http://www.arrl.org/sections/SCV.html</a>       |
| ARRL East Bay Section | <a href="http://www.pdarrrl.org/ebsec/index.html">http://www.pdarrrl.org/ebsec/index.html</a>   |
| ARRL Contest Page     | <a href="http://www.arrl.org/contests">http://www.arrl.org/contests</a>                         |
| Contest Calendar      | <a href="http://www.hornucopia.com/contestcal">http://www.hornucopia.com/contestcal</a>         |
| Callsign Lookup (QRZ) | <a href="http://www.qrz.com/">http://www.qrz.com/</a>                                           |
| Vanity Callsign Info  | <a href="http://www.vanityhq.com/">http://www.vanityhq.com/</a>                                 |
| IRLP Main Page        | <a href="http://www.irlp.net/">http://www.irlp.net/</a>                                         |
| AMSAT                 | <a href="http://www.amsat.org/">http://www.amsat.org/</a>                                       |
| FCC Services          | <a href="http://wireless.fcc.gov/services/amateur">http://wireless.fcc.gov/services/amateur</a> |

### SBARA on the Internet

<http://www.qsl.net/sbara>

On the Air at 147.015 + PL 103.5

### Fremont Repeaters & Net Information

WA6PWW - 147.015 +600Khz, PL 103.5  
 WA6PWW - 223.900 -500Khz, PL 107.2  
 WA6PWW - 442.600 +5Mhz, PL 107.2  
 N6OXR - 146.94 -600Khz, PL 123.0  
 N6OXR - 441.525 +5Mhz, PL 123.0  
 ARES - Tuesday @ 7:30pm - 147.015 + PL 103.5

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*The opinions expressed in the Groundplane are strictly those of the authors.*

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# The Ground Plane



## ANNOUNCEMENTS

SBARA monthly meeting:

April 14th.

Veterans Hall in Niles



**It's April — Come on Down and Have Some Fun !!!**

The Ground Plane—KU6S

<http://www.sbara.org>

South Bay Amateur Radio Association — SBARA

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